

Int'l Appl. No. : PCT/JP2005/003498
Int'l Filing Date : March 2, 2005

AMENDMENTS TO THE SPECIFICATION

Prior to the first line of the specification on page 1, please insert the following paragraph:

This application is the U.S. National Phase under 35 U.S.C. §371 of International Application PCT/JP2005/003498, filed March 2, 2005, which claims priority to Japanese Patent Application No. 2004-059034, filed March 3, 2004. The International Application was not published under PCT Article 21(2) in English.

Please amend the Specification as follows. Insertions are shown underlined while deletions are ~~struck through~~.

The paragraph beginning at page 9, line 3:

As shown in ~~Fig. 3~~Fig. 4, MRI apparatus 300 includes diagnostic imaging unit 301 serving as a mechanism for performing imaging and imaging control unit 302 such that diagnostic imaging unit 301 and imaging control unit 302 are wire-connected through communication network 303. Diagnostic imaging unit 301 shoots a diagnostic image of a patient. Imaging control unit 302 controls the operation of diagnostic imaging unit 301.

The paragraph beginning at page 9, line 9:

As shown in ~~Fig. 5~~Fig. 2, liquid syringe 200 comprises cylinder member 210 and piston member 220 wherein piston member 220 is slidably inserted into cylinder member 210. Cylinder member 210 includes cylindrical hollow body 211 which has conduit 212 formed at the closed leading end.

The paragraph beginning at page 10, line 20:

As shown in ~~Fig. 4~~Fig. 3, chemical liquid injector 100 of the embodiment has injection control unit 101 and injection head 110 constructed as separate components which are wire-connected through communication cable 102.

The paragraph beginning at page 10, line 23:

Injection head 110 drives liquid syringe 200 mounted thereon to inject a liquid therefrom into a patient. Injection control unit 101 controls the operation of injection head 110. Thus, as shown in ~~Fig. 2~~Fig. 5, injection control unit 101 has computer unit 130 and is wire-connected to imaging control unit 302 of MRI apparatus 300 through communication network 304.

The paragraph beginning at page 11, line 7:

Injection head 110 is attached to the top end of caster stand 111 by movable arm 112. As shown in ~~Fig. 4~~Fig. 2, head body 113 of injection head 110 has concave portion 114 formed as a semi-cylindrical groove in the upper surface for removably mounting liquid syringe 200.

The paragraph beginning at page 11, line 15:

Cylinder holding mechanism 116 is formed in concave portion 114 as a different-shaped reentrant groove, with which cylinder flange ~~211~~213 removably engages. Liquid injection mechanisms 117 individually have ultrasonic motor 118 as driving sources which are free from generation of magnetic field even in operation, and slide piston members 220 through screw mechanisms (not shown) or the like. Load cells 119 are also contained in liquid injection mechanism ~~s~~117 and detect the pressure applied to piston members 220.

The paragraph beginning at page 12 line 23:

As shown in ~~Fig. 2~~Fig. 5, in chemical liquid injector 100 of the embodiment, the abovementioned various devices are connected to computer unit 130 which comprehensively controls those various devices. Computer unit 130 is formed of a so-called one-chip microcomputer provided with hardware such as CPU (Central Processing Unit) 131, ROM (Read Only Memory) 132, RAM (Random Access Memory) 133, I/F (Interface) 134 and the like.

The paragraph beginning at page 22, line 7:

Then, ~~CT-scanner~~MRI apparatus 300 receives the data representing the occurrence of abnormality (step T10) and outputs the occurrence of abnormality as a check alarm with guidance display or the like (step S16). When it receives the data representing the stop of operation (step T13), the imaging operation is stopped (step S18).

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The paragraph beginning at page 22, line 12:

In chemical liquid injector 100 and ~~CT scanner~~ MRI apparatus 300 of the embodiment, when the occurrence of abnormality is detected in the abovementioned ready state (steps S13 and T3) or when the occurrence of abnormality is detected during the operation (steps S23 and T9), the occurrence of abnormality is output and notified (steps S26 and T16) and the operation is stopped (steps S28 and T18).

The paragraph beginning at page 30, line 23:

In the above embodiment, RFID chips 214 are placed on liquid syringe 200 and extension tube 230. However, RFID chip 214 may be put only on liquid syringe 200, or RFID chip 214 may be mounted on the various types of peripheral device for the syringe such as a catheter and a liquid bottle other than extension tube ~~214~~ 230 (not shown).